Grand Valley Mathematics Association

Fall Conference 3:30 – 8:45 p.m.

Thursday, November 15, 2018
(Please register by Thursday, November 1)

“MathTech”

Bringing together teachers from the jurisdictions represented by GVMA since 1972. These include all or part of the counties of: Brant, Bruce, Dufferin, Grey, Halton, Huron, Norfolk, Oxford, Perth, Waterloo, Wellington, and Wentworth.

LOCATION 
University of Waterloo, 200 University Avenue West, Waterloo, ON N2L 3G1
Mathematics and Computer Building (MC)

CAMPUS MAP 
http://www.uwaterloo.ca/map

PARKING 
Lot M ($6) From Columbia Street entrance, turn right at Ring Road, and left into Lot M
Lot N ($5) From Columbia Street entrance, turn left at Ring Road, and left into Lot N
Lot W ($5) From Columbia Street, turn at lights onto Hagey Blvd., first left
Lot X ($5) From Columbia Street, turn at lights onto Hagey Blvd., first right
Registration - Mathematics and Computer Building (MC)

SCHEDULE 
3:30 – 4:30 Registration desk is on the 5th floor of the Mathematics and Computer Building.
In MC5501 – pick up package, receipt, nametag, and then enjoy a snack.
4:30 – 5:20 Sessions A1 – A4: Attend only one.
5:35 – 6:25 Sessions B1 – B4: Attend only one.
6:35 – 7:00 Federation Hall (FED) – Cash Bar, Social and Dinnertime Math
7:00 – 7:45 Dinner Buffet in the Main Hall
7:45 – 8:30 After Dinner Speaker - Tania Del Matto
“Supporting youth and startups that want to make the world a better place”
Director of St. Paul’s GreenHouse, St. Paul’s UC, University of Waterloo
8:45 Adjournment

REGISTRATION 
Online registration is open. From the GVMA website (www.gvma.ca), choose Conference.

FEE with dinner 
$48 includes dinner and Session C. Attend one or two sessions: one from A1–4, one from B1–4.
Register online by November 1 – dinner is in Federation Hall (FED).

FEE without dinner 
$35 no dinner – attend one or two sessions: one from A1–4, and one from B1–4.
Register online by November 12.

DINNER 
Thursday, November 1 is the absolute last call for ordering dinner.
Dinner Buffet prepared by Award winning Chefs at Federation Hall.
Dietary restrictions can be accommodated.

MERCHANDISE 
GVMA merchandise for sale (cash or cheque only) from 3:45 – 4:30 in the Registration Area
or may be purchased anytime online through our website.

WEBSITE: 
http://www.gvma.ca 
E-mail: grandvalleymath@gmail.com
3:30 – 4:30 Registration  
**Mathematics and Computer Building (MC), MC5501 on the 5th floor**  
GVMA t-shirts and pi pins for sale  
Refreshments - provided by the Faculty of Mathematics

### ABSTRACTS OF GVMA SESSIONS

Select two (2) sessions, one from A1-4, and one from B1-4.  
Enter your choices as you register online.

4:30 – 5:20 Select only one (1) session from the A’s

<table>
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<tr>
<th>SESSION</th>
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| A1      | 7 and 8         | **Using Sports for Meaningful Mathematics Practice** - Emily De Roche  
Examples of math can be found everywhere - especially in sports. From measurement and geometry, to statistics and probability, sports provide engaging examples for mathematics education. In this session attendees will explore ways to engage their students in mathematics education through sports and will be given access to an online resource that links math learning to Hockey. |
| A2      | 7 to 10         | **Online resources to support your students...and you** - Peter Bolton  
What’s new with Homework Help? It’s been updated and rebranded as TVO MATHIFY. Are you and your students making the most of this free online resource? Join over 3700 Ontario teachers and learn how to make the most of Mathify for in class practice, lesson prep and a home support for students. |
| A3      | 7 to 12         | **Learning with Desmos Activity Builder** - Matt Anderton, Rosie Currie  
Learners will get an introduction on how to use Desmos Activity Builder to facilitate activities with their students, investigate the types of activities Desmos offers, and how to create their own activity. |
| A4      | 7 to 12         | **What Is Your Data Worth?** - Carlo Fusco  
As many staff and students embrace the use of social media for home and work, it is important to learn how it can be used effectively within a professional and personal context. In this session we will look at some of the services that various groups within our schools are using. Teaching students about digital citizenship is the responsibility of all teachers. We need to become comfortable with it so that we can model it for our students. By understanding our own Digital Footprint we can guide students to make good decisions when they are online. |
### Lessons from Elementary: The Comprehensive Math Program in the Transition Years - Justin Hui, Ken Pettigrew

In this session, participants will experience the process of creating highly effective word problems that promote mathematical thinking from an inquiry approach. Knowing WHY they are using the mathematics infuses power that kick starts understanding HOW to use the mathematics. This approach engages students, and promotes a sense of resiliency as they willingly take risks for the purpose of understanding.

### Learn to use QR codes (those magic squares with dot patterns) to link your students to many resources for your math classroom - Angela Bradley

This session will include a demonstration of many uses of QR codes in a high school math classroom. Effortlessly link your students to interactive resources. Give students instant feedback during practice. Catch up absent students with connections to lesson videos. Instantly pull up Desmos activities... and more! Learn to easily link your students to the resources they need to increase engagement and success.

### Mazecraft: Open Ended Math and Coding Combined in a Unique Competition - Scott McKenzie

This session will share a Math/Coding opportunity developed for Elementary students that combines open-ended problem solving and the programming of a Sphero robotic ball. We will look how the open-ended math problem was the basis for a maze design challenge for students with various strands of the Mathematics curriculum. This model can be used in the classroom, but can also be expanded to a board-wide competition. The competition model is an opportunity for collaboration between high school Computer Science students and Elementary students to issue weekly challenges, and to judge their final design, and coding prowess on the day of the competition.

### GeoGebra - Math Teaching's Swiss Army Knife Now with Augmented Reality - John Rodgers

GeoGebra has evolved from its humble beginnings as a free 2-D geometry and algebra application to a fully featured, web-enabled mathematics tool that includes three dimensional constructions (and is still free). This session will focus on the new addition of augmented reality to GeoGebra's rich feature set. Come and experience mathematics in a whole new way.

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### Dinner Buffet [Federation Hall, Main Hall]

Begin your dinner with a freshly baked crusty roll and gravitate toward crudités with southwestern ranch dip. The Chef’s appetizers include a Classic Caesar salad with house-smoked bacon, a Kale and Cranberry salad, and a Red and Gold Beet Salad. The entree is a Seared Tender Chicken Breast with Mediterranean Salsa and a Four Cheese Manicotti for Pasta. The Chef’s choices of fresh seasonal vegetables and potato or rice compliment the meal. Visit the dessert table and choose from many of the assorted squares. Relax with coffee or tea and prepare to be dazzled by the after dinner speaker.

### After Dinner Speaker - Tania Del Matto

“Supporting youth and startups that want to make the world a better place”

GreenHouse is a discovery lab and incubator where students at the University of Waterloo are provided with resources and support to create and launch projects and startups that address pressing social and environmental problems. This talk will share some stories of students as they go on their journeys of self-discovery as they experience first-hand how to bring an idea into action.